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# **Rule for the 12<sup>th</sup> Periodic Amendment of the Fruits and Vegetables Regulations**

**Environmental Assessment,  
September 2004**

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# I. Purpose and Need for Proposed Action

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS) is proposing to amend the fruits and vegetables regulations contained in 7 Code of Federal Regulations (CFR) Part 319.56 to allow the importation into the United States of a number of fruits and vegetables from various areas of the world under certain conditions.

One of the proposed rule changes would allow the importation of the following fruits and vegetables from Mexico if inspected, and subject to appropriate regulatory action if quarantine pests are determined to be present at the port of first arrival in the United States. These fruits and vegetables include *Allium* spp., asparagus, banana, beets, carrots, coconut (fruit without husk), cucurbits, eggplant, grape, jicama, lemon, sour lime, parsley, pineapple, prickly pear pads, radish, tomato, and tuna. Despite the fact that these fruits and vegetables currently have no specific regulations authorizing their entry, these fruits and vegetables have historically entered the United States from Mexico under permit issued by USDA, APHIS, Plant Protection and Quarantine (PPQ). The entry requirements in the proposed rule for these fruits and vegetables are the same as those in permits currently authorizing their entry into the United States.

Another proposed amendment would allow the importation of commercial shipments of certain *Annona* species from Grenada, and African horned cucumber from Chile, pending inspection and subject to appropriate regulatory action if quarantine pests are determined to be present, at the port of first arrival in the United States. These fruits and vegetables have not been previously approved for entry into the United States from these countries.

The following fruits and vegetables would be required to meet certain conditions that could include treatment, growing areas free of certain quarantine pests, specified growing conditions, limits on dates of shipping, inspection and monitoring of growing areas by the plant protection organization of the country where grown, trapping in the growing areas, fruit cutting, safeguarding during transport, and/or phytosanitary certificates: pitaya from Mexico, cucurbits and grapes from Korea, and melon from Peru.

In this document, APHIS analyzes the potential environmental effects of the proposed rule changes to 7 CFR § 319.56. The main environmental issue is the risk of introduction into the United States of quarantine pests associated with the proposed commodities for importation.

This environmental assessment (EA) was prepared to comply with the National Environmental Policy Act of 1969 (NEPA) 42 United States Code (U.S.C.) 4321, *et. seq.*) as prescribed in implementing regulations adopted by the Council on Environmental Quality (40 CFR §§1500–1508), by USDA (7 CFR part 1b) and by APHIS (7 CFR part 372), and to satisfy Executive Order (EO) 12114, “Environmental Effects Abroad of Major Federal Actions.”

## **II. Alternatives, Including the Proposed Action**

This EA analyzes potential environmental consequences of a proposal to amend the regulations governing importation of fruits and vegetables into the United States (7 CFR § 319.56). Two possible alternatives are considered in this EA—regulation under the proposed rule (preferred alternative) and the current regulation of the proposed fruits and vegetables from Mexico, Korea, Grenada, Peru, and Chile (no action alternative).

### **A. No Action**

The no action alternative would be to leave 7 CFR § 319.56 unchanged. Approved fruits and vegetables from Mexico would continue to enter the United States under permit. Cucurbits and grapes from Korea, melon from Peru, pitaya and coconut fruit with milk and husk from Mexico, *Annona* spp. from Grenada, and African horned cucumber from Chile would not be allowed to be imported into the United States.

### **B. Amend Regulations According to the Proposed Rule (preferred alternative)**

This alternative would change 7 CFR § 319.56 according to the proposed rule.

For *Allium* spp., asparagus, banana, beets, carrots, coconut (fruit without husk), cucurbits, eggplant, grape, jicama, lemon, sour lime, parsley, pineapple, prickly pear pads, radish, tomato, and tuna from Mexico, cherimoya, soursop, custard apple, sugar apple, and atemoya from Grenada, and African horned cucumber from Chile—these commodities would be inspected and if pests were found, would be subject to appropriate regulatory action at the port of arrival in the United States. In addition, distribution of African horned cucumber from Chile would be limited to the continental United States.

Coconut fruit with milk and husk from Mexico must be of either the Malayan dwarf variety or the Maypan variety (=F1 hybrid, Malayan Dwarf × Panama

Tall). Coconut fruit with husk and milk imported into the United States from Mexico must be accompanied by a phytosanitary certificate from the national plant protection organization of Mexico, which declares that the fruit is of the Malayan dwarf variety or Maypan variety.

Pitaya from Mexico must be grown in areas free from fruit flies. In addition, the national plant protection organization of Mexico will issue a phytosanitary certificate with an additional declaration stating that the fruit in the shipment was found free of the mealybug species gray pineapple mealybug, *Dysmicoccus neobrevipes*, and the passionvine mealybug, *Planococcus minor*.

Cucurbits from Korea must be grown in pest-proof greenhouses registered by the Korean Ministry of Agriculture and Forestry (MAF). MAF will inspect and regularly monitor greenhouses for plant pests. MAF must inspect greenhouses at intervals of no more than 2 weeks from the time of fruit set until the end of harvest. Inspections will include random sampling and cutting of the fruit. MAF will set and maintain pumpkin fruit fly (*Bactrocera depressa*) traps inside greenhouses from October 1 to April 30. If a single pumpkin fruit fly is captured, that greenhouse will lose its registration until trapping shows that the infestation has been eradicated. Cucurbits may only be planted, grown, and shipped to the United States from December 1 through April 30, when pumpkin fruit fly populations are at their lowest in Korea. Each shipment of cucurbits from Korea must be accompanied by a phytosanitary certificate issued by MAF with the declaration that the cucurbits were grown in registered greenhouses as specified by the proposed regulations. Each shipment must be safeguarded from pest infestation from harvest until export, including use of insect-proof cartons. These safeguards must be intact when the shipment arrives at the port in the United States.

For grapes from Korea, production sites where the grapes are grown will be inspected during the growing season. MAF will inspect 250 grape vines per hectare, inspecting leaves, stems, and fruit of the vines. If evidence of yellow peach moth (*Conogethes punctiferalis*), grapevine moth (*Eupoecilia ambiguella*), leaf-rolling tortrix (*Sparganothis pilleriana*), apple heliodinid (*Stathmopoda auriferella*), or the plant pathogenic fungus, *Monilinia fructigena* is detected during inspection, the production site will be immediately rejected. Exports from that production site will be cancelled until APHIS and MAF have agreed that the pest eradication measures taken have been effective and the pest risk has been eliminated. Fruit will be bagged from the time the fruit sets until harvest. Each shipment will be inspected by MAF before export. For each shipment, MAF will issue a phytosanitary certificate with an additional declaration stating that the fruit in the shipment was found free of yellow peach moth, grapevine moth, leaf-rolling tortrix, apple heliodinid, and *Monilinia fructigena*.

For melon from Peru, these fruits must be grown in areas of Peru considered by APHIS to be free of the South American cucurbit fruit fly (*Anastrepha grandis*). Areas in Peru considered free of South American cucurbit fruit fly are Departments of Lima, Ica, Arequipa, Moquegua, and Tacna. In addition, all consignments of melon must be accompanied by a phytosanitary certificate issued by the Peruvian Plant Protection Organization (PPO) that includes a declaration indicating that the melons were grown in an area recognized to be free of South American cucurbit fruit fly, and upon inspection found free of the gray pineapple mealybug. For shipping, the melons must be safeguarded in pest proof boxes to prevent pest infestation. The packaging must be intact on arrival in the United States. Only commercial shipments of these commodities will be allowed. All shipments of cantaloupe must be labeled in accordance with 7 CFR 319.56–2(g).

### **III. Environmental Impacts of the Proposed Action and Alternatives**

#### **A. No Action**

**Mexican Fruits and Vegetables:** *Allium* spp., asparagus, banana, beets, carrots, coconut (fruit without husk), cucurbits, eggplant, grape, jicama, lemon, sour lime, parsley, pineapple, prickly pear pads, radish, tomato, and tuna from Mexico have a history of high volume (1,000 or more entries per year along the entire border) in combination with low pest risk (no more than one actionable pest may be found on a commodity in a 1-year period or no more than three actionable pests found over a 6-year period). These fruits and vegetables are inspected, and subject to appropriate regulatory action if quarantine pests are determined to be present. Currently these fruits and vegetables from Mexico are admissible based on the history of imports into this country. These commodities have been authorized entry by permit. There would be no change in the level of pest risk if the CFR was not amended to include these commodities from Mexico. Rather, the issue is transparency since currently, these commodities are allowed under individual permits. Under the “no action” alternative, this process would continue to be conducted individually between APHIS and the permittee without transparency to the U.S. public, as required by the Administrative Procedures Act of 1946 (APA) ( 5 U.S.C. §§ 551–59, 701–06, 1305, 3105, 3344, 5372, 7521). The purpose of the APA is to clarify the process of making regulations, and to allow greater accessibility and participation by the public in the rulemaking process.

## B. Amend Regulations According to the Proposed Rule

**Mexican Fruits and Vegetables:** *Allium* spp., asparagus, banana, beets, carrots, coconut (fruit without husk), cucurbits, eggplant, grape, jicama, lemon, sour lime, parsley, pineapple, prickly pear pads, radish, tomato, and tuna from Mexico currently enter the United States under permit. These low risk, high volume commodities are inspected at the port of entry, and subject to appropriate regulatory action if quarantine pests are determined to be present. Currently these fruits and vegetables from Mexico are admissible into this country. The addition of these commodities into the CFR is to increase APHIS' transparency to the public and to allow public participation in this process, as mandated by the APA.

***Annona* spp. from Grenada:** The genus *Annona* contains hosts of several species of *Anastrepha* fruit flies. The only *Annona* species that is reported as a field host of the West Indian fruit fly is *Annona hayesii* Saff. ex Standl, from only one record (from Panama before 1942). *Anastrepha* spp. fruit flies have not been intercepted (1971–2002) in *Annona* from the Lesser Antilles where the West Indian fruit fly occurs on most of the islands. The proposed *Annona* spp. recommended for importation into the United States from Grenada include cherimoya (*A. cherimola*), soursop (*A. muricata*), custard apple (*A. reticulata*), sugar apple (*A. squamosa*), and atemoya (*A. squamosa* x *A. cherimola*) and are not known fruit fly hosts. In addition, only commercial shipments of these fruits will be authorized entry into the United States since *Annona* spp. that are not produced in commercial operations are more likely to be infested with plant pests than those that arrive in commercial shipments. Commercial shipments, as defined in 7 CFR § 319.56–1, are shipments of fruits and vegetables that an inspector identifies as having been produced for sale and distribution in mass markets.

**African Horned Cucumber from Chile:** African horned cucumber, *Cucumis metuliferus*, is endemic to southern and central Africa and is considered a wild relative of cucurbits such as melon and cucumber. This crop is grown in New Zealand, Kenya, Israel, Chile, and the United States. It has been cultivated in Chile since 1996 and the only reported pesticide use has been sulfur as a fungicide for powdery mildew. It is a specialty crop, grown in small quantities and is intended for both food and decorative purposes. Up to two 40-foot containers (equivalent to 32,000 lbs. of fruit are expected to be shipped annually March through May. A pathway-initiated pest risk assessment (APHIS, 2002a) of African horned cucumber from Chile into the United States was prepared to examine the risks associated with the importation of this commodity. No identified quarantine significant pests were expected to follow the pathway of introduction. All shipments will be

inspected at the port of entry in the United States and subject to appropriate regulatory action if quarantine pests are discovered.

African horned cucumber is indicated to have weediness potential in some cases. It has naturalized in Queensland, Australia where it has become an agricultural weed in some areas and has been reported as introduced into two counties in Florida. Introductions have not been reported where this crop is grown in California. When climactic parameters were compared between areas in Australia where the species is reported as introduced and locales in the United States, the corresponding locations were only Tampa, Florida and Brownsville, Texas (APHIS, 2002a).

**Pitaya from Mexico:** A pathway-initiated pest risk assessment (APHIS, 2002b) of fresh pitaya from Mexico into the United States was prepared to examine the risks associated with the importation of this commodity. The term pitaya is used to refer to all cacti that produce edible fruit (except *Opuntia* spp.) that are botanically related to *Hylocereus* spp., including species of *Acanthocereus*, *Cereus*, *Lemaireocereus*, and *Selenicereus*. The risk assessment identified pests that are reasonably expected to follow the pathway on pitaya from Mexico including fruit flies in the genus *Anastrepha* and *Ceratitis capitata* and two mealybugs, the gray pineapple mealybug (*Dysmicoccus neobrevipes*) and the passionvine mealybug (*Planococcus minor*).

*Anastrepha* spp. fruit flies attack fleshy-fruited species in over 20 genera in a variety of families. The pests lower the value of a commodity by increasing the costs of chemical controls for adults, and larvae may make the fruit completely unmarketable. These pests can attack many hosts and infestation of rare and other native plant species by introduced *Anastrepha* spp. could cause negative impacts to plant community diversity and wildlife at a regional level due to the potential loss of fruit and seed set. Native pomaceous and drupaceous species of Rosaceae (e.g., *Crataegus*, *Mespilus*, *Prunus*, *Sorbus*) and native *Diospyros* may be at risk of attack by the Mexican fruit fly (*A. ludens*). Mexican fruit fly and the Mexican form of the South American fruit fly (*A. fraterculus*) attack plants in at least seven families: Rubiaceae, Rosaceae, Myrtaceae, Anacardiaceae, Sapotaceae, Combretaceae, and Euphorbiaceae (Hernandez-Ortiz, 1992). The sapodilla fruit fly (*A. serpentina*) occurs on hosts in at least six plant families (Hernandez-Ortiz, 1992). Others report the host range of this fly as about 40 plant species in 13 plant families.

*Ceratitis capitata* attacks a wide variety of unrelated fruit crops including many deciduous and subtropical fruit trees (White and Elson-Harris, 1992; Fletcher, 1989; Hendrichs *et al.*, 1983; Metcalf *et al.*, 1962). Native

pomaceous and drupaceous species of Rosaceae (e.g., *Crataegus*, *Mespilus*, *Prunus*, *Sorbus*) and native *Diospyros* and *Juglans* from Florida to California are likely to be at risk. Infestation of rare and other native plant hosts could cause negative impacts of plant community diversity and wildlife due to the potential loss of fruit and seed set (ARS, 2001; Martin *et al.*, 1951)

To prevent the introduction of fruit flies, pitaya from Mexico must be grown in areas free from fruit flies. In addition, the Mexican plant protection organization, Sanidad Vegetal, will issue a phytosanitary certificate with an additional declaration stating that the fruit in the shipment is free of the passionvine and gray pineapple mealybugs.

**Coconut fruit with milk and husk from Mexico:** In 1989, APHIS prepared a decision sheet in response to Mexico's request to export coconut fruit with milk and husk to the United States. Because APHIS identified two quarantine pests of concern, (the red ring nematode [*Rhadinaphelenchus cocophylus*] and lethal yellowing disease), the request was denied. However, APHIS has reconsidered the decision because the risk associated with red ring nematode is low and because of proposed conditions adequate to prevent the introduction of lethal yellowing disease.

Red ring disease is caused by the plant parasitic nematode *Rhadinaphelenchus cocophylus* which is transmitted by the palm weevil *Rhynchophorus palmarum*. Symptoms of the disease include a band of discolored, reddish-brown tissue about 5 cm from the edge of leaf stems. Roots are similarly discolored, and have a soft, spongy cortex. Damage causes reduction in water uptake by the tree. Trees may die 4 months after first symptoms appear. Coconuts are especially susceptible for 2 years before and after the start of fruit bearing. Older and younger trees are more resistant. This disease has been known to occur in Mexico, Central America, South America, Costa Rica, and the Dominican Republic. The disease vector, *R. palmarum*, has been reported from a similar range as well as Texas and California. The risk of introducing red ring nematode in coconuts with husk and milk would be low since nuts on infected trees fall prematurely and would not be harvested. Nematodes are rarely found in immature fruit. In addition, seed coconuts, which would be equivalent to coconuts with husk and milk, have been successfully imported from Costa Rica, where the red ring nematode is known to occur, for over a decade. Inspection at the port of entry is sufficient to mitigate the risk associated with red ring disease.

Lethal yellowing disease is caused by a mycoplasma-like organism (MLO) believed to be transmitted by the planthopper insect *Myndus crudus*. The MLO causes problems with water transport within the palm and kills the palm

within three to six months. This disease has been known to occur in Jamaica since the 1800's and has been reported to occur in Cuba, Haiti, the Dominican Republic, the Cayman Islands, the Bahamas, Mexico, Florida, and the Rio Grande Valley of Texas. The only practical control measure is the use of genetically resistant coconut cultivars. The Malayan Dwarf and Maypan (Malayan Dwarf × Panama Tall) hybrids are highly resistant but not immune to lethal yellowing disease; however, no MLO's, including lethal yellowing, are known to be seed transmitted. Consequently, coconuts with husk and milk of the Malayan Dwarf and Maypan hybrids do not harbor lethal yellowing MLO's. Therefore, APHIS will require that coconut fruit with milk and husk from Mexico must be of either the Malayan dwarf variety or the Maypan variety (=F1 hybrid, Malayan Dwarf × Panama Tall). Coconut fruit with husk and milk imported into the United States from Mexico must be accompanied by a phytosanitary certificate from the national plant protection organization of Mexico, which declares that the fruit is of the Malayan dwarf variety or Maypan variety

**Melon from Peru:** APHIS proposes to allow entry of melons (*Cucumis melo* subsp. *melo*) and watermelon (*Citrullus lanatus* var. *lanatus*) fruits into the United States from Peru. Melons (*Cucumis melo* subsp. *melo*) include true cantaloupes, netted melons (muskmelon, nutmeg melon, and Persian melon), vegetable melons (snake melon and oriental pickling melon), and winter melons (honeydew and casaba melon). A pathway-initiated risk assessment was prepared (APHIS, 2002c) to analyze the pest risks associated with the importation of these fruits. The risk assessment identified two quarantine pests likely to follow the pathway with high risk potential, the South American cucurbit fruit fly (*A. grandis*) and the gray pineapple mealybug (*D. neobrevipes*). The South American cucurbit fruit fly has been reported to attack the fruits of various native and introduced species of Cucurbitaceae. The primary hosts are melon and ornamental gourd. The gray pineapple mealybug is a polyphagous species and has been reported to attack plants in at least 33 families (CPC, 2001).

The program has determined that the proposed conditions and inspection protocols can effectively mitigate the plant pest risks associated with melons from Peru. These conditions include: growing these fruits in areas considered by APHIS to be free of South American cucurbit fruit fly (§ 319.56–2(f)(1)); importation of only commercial shipments; safeguarding consignments while in transit to the United States; a phytosanitary certificate issued by PPO declaring that the fruit was grown in an area recognized to be free of the South American cucurbit fruit fly; and, upon inspection found free of the gray pineapple mealybug. All boxes in each shipment must be labeled in accordance with 7 CFR § 319.56–2(g), and must include the name of the orchard, grove of origin, or the name of the grower, the name of the

municipality and state in which it was produced, and the type and amount of fruit it contains. In addition, the box must state “Not for distribution in HI, PR, VI, or Guam.” All shipments are subject to inspection by APHIS officials at the port of entry in the United States.

**Systems Approach:** The following fruits and vegetables are proposed for importation using the “systems approach.” The systems approach includes certain regulations on acceptable growing and harvest conditions, pest risk-reducing cultural practices, and on proper post-harvest handling. This approach requires a defined set of phytosanitary measures, at least two of which have an independent effect in mitigating pest risk associated with the movement of commodities. The overall systems approach operates like a fail-safe system in that tiered safeguards are built into the process such that if one mitigating measure fails, other safeguards exist to ensure that the risk is progressively reduced and managed. Measures may be redundant to assure an adequate reduction in pest risk and to assure that the reduction is maintained during the entire process. The systems approach for Unshu oranges from Japan has been in use for more than 30 years. Others include importation of various fruits and vegetables from Europe, chrysanthemums from various countries and carnations from the United Kingdom. In a systems approach, although each of the elements employed mitigates the risk of a pest introduction, the risk cannot be completely eliminated irrespective of the suite of pest mitigating elements employed (National Plant Board, 2002).

The systems approach would be applied to each of the following commodities proposed for importation.

**Cucurbits from Korea:** In 1992, cucurbits were permitted to enter the United States from Korea. In 1993, it was discovered that the quarantine pest pumpkin fruit fly (*Bactrocera depressa*) occurs in Korea and shipments of these commodities to the United States were prohibited. In 1996, a pathway-initiated pest risk assessment (APHIS, 1996) of cucurbits from South Korea into the United States was prepared to examine the risks associated with the importation of this commodity. The risk assessment covered the following cucurbits: watermelon (*Citrullus vulgaris*), squash (*Cucurbita maxima*), cucumber (*Cucumis sativus*), and oriental melon (*Cucumis melo*). The risk assessment identified five organisms with high or medium pest risk potential including pumpkin fruit fly, cucumber moth (*Diaphania indica*), Asian corn borer (*Ostrinia furnacalis*), and cucumber green mottle mosaic virus.

The primary host for the pumpkin fruit fly is pumpkin, but attacks other cucurbits. Cucumber moth primarily attacks Cucurbitaceae, although it has also been recorded from other plant families, notably Leguminosae (soybean) and Malvaceae (cotton). Maize is the main host plant of the Asian corn borer

but it is also found on a range of other plants from diverse habitats. Primary hosts for cucumber green mottle mosaic virus include cucumber, watermelon, bottle gourd, melon, and bitter melon (CPC, 2001).

The program has determined that the proposed conditions and inspection protocols can effectively mitigate the plant pest risks associated with cucurbits grown in Korea. These conditions include: growing the cucurbits in registered, pest-proof greenhouses regularly inspected by the Korean Ministry of Agriculture and Forestry (MAF); maintenance of pumpkin fruit fly traps inside greenhouses from October 1 to April 30; shipping to the United States only from December 1 through April 30 when pumpkin fruit fly populations in Korea are overwintering and adults are not present to infest fruit; safeguarding from harvest through transit until arrival in the United States, including the use of insect-proof cartons; and, requiring all shipments to have an approved APHIS permit and a phytosanitary certificate issued by MAF indicating that the cucurbits were grown and handled in accordance to the required conditions. All shipments are subject to inspection by APHIS officials at the port of entry in the United States.

**Grapes from Korea:** A pathway-initiated pest risk assessment (APHIS, 2000) of grapes (*Vitis* spp.) from Korea into the United States was prepared to examine the risks associated with the importation of this commodity. Pests identified to have high risk potential on grapes from Korea are four moths, yellow peach moth (*Conogethes punctiferalis*), grapevine moth (*Eupoecilia ambiguella*), leaf-rolling tortrix (*Sparganothis pilleriana*), and apple heliodinid (*Stathmopoda auriferella*), and one plant pathogenic fungus, *Monilinia fructigena*.

The yellow peach moth is a polyphagous insect which has a wide host range. Its primary hosts are peaches, sorghum, sunflowers, maize, and masson pine. The primary hosts of grapevine moth are grapevine, damson, and blackcurrant. The primary hosts for the leaf-rolling tortrix include grapevine and larches. Navel orange and mango are primary hosts for the apple heliodinid. *M. fructigena* will not only infect all drupaceous and pomaceous species but also many other members of the plant family Rosaceae, under suitable environmental conditions. The main commercial crops that are hosts to *M. fructigena* include apple, pear, quince, plum, and sweet cherry, sour cherry, peach, nectarine, and apricot (CPC, 2001).

The program has determined that the proposed conditions and inspection protocols can effectively mitigate the plant pest risks associated with grapes grown in Korea. These conditions include: inspection of production sites where grapes are grown by MAF during the growing season; rejection of production sites where these pests are detected and cancellation of exports

from those production sites until pests have been eradicated; bagging of the fruit from set to harvest; inspection of shipments by MAF before export; and, requiring all shipments to have an approved APHIS permit and a phytosanitary certificate issued by MAF indicating that the fruit in the shipment is free of pests of concern to the United States. All shipments are subject to inspection by APHIS officials at the port of entry in the United States.

**Documentation, Compliance and Sanctions:** An important part of the importation of fruits and vegetables involves documentation of the approved permit and adherence to pest mitigation requirements for entry into the United States. All shipments of these fruits and vegetables are required to have an approved permit from APHIS and have a phytosanitary certificate indicating that the imported commodities were produced and handled in accordance with the growing and shipment requirements and a statement of pest-free status of the shipment based on inspection. This documentation poses no adverse environmental impacts, per se, but the accuracy of the information provided is critical to exclusion of the potential pest risks. The high potential risks from damaging pests associated with noncompliance make it APHIS' policy to provide a strong deterrent. Therefore, APHIS keeps importers and shippers informed of their import regulations and of the penalties for inadequate compliance. The importer or shipper could be subject to civil penalties, criminal fines, jail sentences, and loss of revenue due to APHIS' rejection of commodities, permit applications, and/or compliance agreements. A major tool for APHIS is the option to refuse entry, require treatment, or require destruction of infested or potentially infested cargo. These options are costly to the shipping line and exporter, who must assume all costs for the delays and any treatments. This offers strong incentive for their full compliance with import regulations. Monitoring of the rates of compliance with a phytosanitary rule promulgated in 1998 found that proper compliance with those import requirements were achieved 98% of the time. Comparable compliance could be expected for the proposed regulations.

**Programs to Control Introduced Pests:** Pest mitigations, including treatments, inspection, or systems approach, are designed to prevent introduction of nonindigenous pest species. However, if pests accompanying shipments of the proposed commodities were introduced and became established, an eradication program may be initiated to eliminate any such infestations. Although eradication of any nonindigenous pest may require the use of pesticides, APHIS would prepare the necessary environmental documentation under NEPA and the Endangered Species Act (ESA) in advance of any eradication activities. Therefore, discussion of indirect effects at this time would be both speculative and premature. However, APHIS and its cooperators have responded to introductions of fruit flies currently and in

the past, combining forces with cooperators for the exclusion, detection, and eradication of these pests. In 2001, APHIS completed an Environmental Impact Statement (EIS) document concerning the treatment alternatives for infestations of fruit flies (*Anastrepha*, *Ceratitis*, *Rhagoletis*, *Dacus*, and *Toxotrypana* species) in the United States, and it is incorporated by reference (Fruit Fly Cooperative Control Program, Final Environmental Impact Statement, 2001). Alternatives included no action, a nonchemical program and an integrated program. This EIS examined comprehensively the environmental consequences associated with the programs' use of control methods (especially chemical control methods). Although APHIS concluded that each alternative has potential for adverse environmental consequences, an integrated control program was selected as the preferred alternative since it offers the greatest flexibility in responding to fruit fly pest outbreaks. The integrated control method would use exclusion, detection and prevention, and control methods to achieve program objectives. For control, chemical and/or nonchemical control methods would be relied upon, based upon the site-specific characteristics of the program areas. When site-specific infestations are identified, APHIS prepares the necessary environmental documentation under NEPA and ESA in advance of any control activities.

**Potential Cumulative Impacts:** The proposed rule's mitigations for quarantine pests associated with the proposed fruits and vegetables are not expected to pose any substantial cumulative impacts since chemical treatments of these commodities are not required. However, commercial fruit and vegetable consignments infested with quarantine pests could be fumigated with methyl bromide at the port of entry. The fumigant, methyl bromide, is destructive to the ozone layer because it is a major source of bromine in the atmosphere and bromine is one of the most potent destroyers of ozone (Bell *et al.*, 1996). The destruction of ozone in the atmosphere allows increased amounts of ultraviolet (UV) radiation to get through the atmosphere to the Earth's surface. Methyl bromide was listed as an ozone-depleting substance under the Montreal Protocol. In September 2002, APHIS completed an EIS concerning the importation of wood from Mexico (Rule for the Importation of Unmanufactured Wood Articles From Mexico, With Consideration for Cumulative Impact of Methyl Bromide Use, Final Environmental Impact Statement, September, 2002). The Methyl Bromide Cumulative Effects Analysis chapter of the EIS discusses the environmental consequences of methyl bromide on the environment. However, it is very unlikely that shipments of these commodities would be fumigated with methyl bromide. Infested shipments are usually destroyed or returned to the country of origin. Therefore, any increases in methyl bromide use for the treatment of the proposed fruits and vegetables would be negligible and no significant cumulative impacts due to increased methyl bromide use will occur.

**Other Environmental Statutes:** Section 7 of the ESA and its implementing regulations require Federal agencies to consult with the U.S. Fish and Wildlife Service (FWS) and/or the National Marine Fisheries Service to insure that their actions are not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of critical habitat. APHIS has considered the potential effects on endangered and threatened species and their habitats. A biological assessment was prepared to assess the potential effects to endangered and threatened species. For pitaya from Mexico, grapes and cucurbits from Korea, and melon from Peru, the quarantine pest risks in the absence of mitigation pose impacts that may affect many endangered and threatened species, but those risks were adequately alleviated by the proposed pest mitigations for each commodity. Based upon the ability of the requirements included in the proposed rule to eliminate pest risk, the program has determined that the importation of the proposed commodities would pose no effect to any endangered and threatened species or their habitats.

EO 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," focuses Federal attention on the environmental and human health conditions of minority and low-income communities, and promotes community access to public information and public participation in matters relating to human health or the environment. The EO requires Federal agencies to conduct their programs, policies, and activities that substantially affect human health or the environment in a manner so as not to exclude persons and populations from participation in or benefitting from such programs. It also enforces existing statutes to prevent minority and low-income communities from being subjected to disproportionately high and adverse human health or environmental effects. Both alternatives were analyzed in their ability to affect minority and low-income populations. Neither alternative was found to pose disproportionately high or adverse human health or environmental effects to any specific minority or low-income group.

EO 13045, "Protection of Children from Environmental Health Risks and Safety Risks," acknowledges that children may suffer disproportionately from environmental health and safety risks because of their developmental stage, greater metabolic activity levels, and behavior patterns, as compared to adults. The EO (to the extent permitted by law and appropriate, and consistent with the agency's mission) requires each Federal agency to identify, assess, and address environmental health risks and safety risks that may disproportionately affect children. Neither alternative is expected to have disproportionately high or adverse human health or environmental effects to children.

## IV. Listing of Agencies and Persons Consulted

Environmental Services  
Policy and Program Development  
Animal and Plant Health Inspection Service  
U.S. Department of Agriculture  
4700 River Road, Unit 149  
Riverdale, MD 20737

Phytosanitary Issues Management  
Import and Interstate Services  
Plant Protection and Quarantine  
Animal and Plant Health Inspection Service  
U.S. Department of Agriculture  
4700 River Road, Unit 140  
Riverdale, MD 20737–1236

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